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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Gertjan Yntema

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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EXAMINER

BITAR, NANCY

ART UNIT

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2624

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,248	YNTEMA, GERTJAN	
	Examiner	Art Unit	
	NANCY BITAR	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's response to the last Office Action, filed 10/08/2008, has been entered and made of record.
2. Applicant has amended claims 1-13. Claims 1-13 are currently pending.
3. Applicant's arguments, see pages 9-13, filed 01/08/2009, with respect to the rejection(s) of claim(s) 1-13 under 35 USC 103 (a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kramer et al (US 7,263,201) and further in view Morioka et al (US 2001/0046198)

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional

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descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101.

... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claim(s) 1-13 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim(s) 1 define a “record carrier” with descriptive material. Claim 13 defines “a method of providing a watermark on a record carrier” with descriptive material. While “functional descriptive material” may be claimed as a statutory product (i.e., a “manufacture”) when embodied on a tangible computer readable medium, a “record carrier” embodying that same functional descriptive material is neither a process nor a product (i.e., a tangible “thing”) and therefore does not fall within one of the four statutory classes of § 101. Claims 2-12 depends on claim 1 and are therefore unstatutory.

Examiner Notes

5. Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially

teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1- 13 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1- 20 of U.S. Patent No. US 7,263,201. Although the conflicting claims are not identical, they are not patentably distinct from each other for instance :

Claims 19 of U.S. 7,263,201	Claim 13 of this application 10/597248
A method of providing a watermark on a record carrier the method comprising acts of:	A method of providing a watermark on a record carrier the method comprising acts of:
receiving uncoded data ,	receiving uncoded data ,
receiving information about the watermark	receiving first information relating to the

which is to be provided in the encoded data	watermark, which first information is to be provided in the encoded data,
	receiving second information relating to the watermark, which second information is to be provided in a non data area
encoding the uncoded data to encoded data by means of a channel code, in which a parameter of the channel code is controlled under the influence of the information about the watermark for introducing a predetermined run length distribution in the marks on the record carrier, so that the watermark is detectable on the record carrier;	encoding the uncoded data to encoded data by means of a channel code, in which a parameter of the channel code is controlled under the influence of the first information relating to the watermark for introducing a predetermined run length distribution in the marks on the record carrier
storing the encoded data on the record carrier	storing the encoded data on the record carrier to render the watermark visually discernable in a data area
(claim 20) The method as claimed in claim ii, wherein in that the record carrier has two areas, in which the parameter is controlled in a first	

area for introducing the predetermined run length distribution in the marks on the record carrier, so that the watermark is detectable on the record carrier, while no watermark is present in a second area	storing the second information in the non-data area to render the watermark visually discernable in the non-data area
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Note the comparison above, claim 13 of the instant application deletes number of limitation such as a first information and second information as recited in claim 19-20 of the U.S. Patent No. 7,263,201. It would have been obvious to use the different areas as recited in claim 20 of the US patent 7,263,201 as the second information of the instant application in order to render the watermark visually discernable in a data area. As to independent claims 1-12, these claims are analyzed as previously discussed with respect to independent claim 1-20 of US patent 7,263,201.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 1- 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami et al (EP 0997899) in view of Kramer et al (US 7,263,201) and further in view Morioka et al (US 2001/0046198)

As to claims 1 and 13, Murakami et al teaches A record carrier comprising a data area (22) for storing data in the form of marks (The optical disk 100 includes a main information area for recording main information 110 and an additional information area for recording additional information 101. figure 1A, paragraph [0021]) , in which the data is encoded by means of a channel code, wherein a parameter of the channel code is controlled so as to introduce a predetermined run length distribution in the marks on the record carrier, thereby introducing first information relating to a visually discernable watermark, and a non-data area (The additional information area is located at a predetermined area in the inner peripheral portion of the optical disk, but it may be located at a predetermined area in the outer peripheral portion which are different than the lead-in or lead out area; paragraph [0021]) comprising second information comprising picture and/or text information relating to a visually discernable watermark (A secret key generated from the BCA signals, ID1, is compared with disk ID2 read from the superposed signals of the video signals, note that the BCA data is superimposed to the main area in a visually discernable watermarking effect , paragraph [0092]),the first and the second information forming the visually discernable watermark (paragraph [0093], figure 20). While Murakami meets a number of the limitations of the claimed invention, as pointed out more fully above, Murakami fails to specifically teach the first information relating to the visually discernable watermark is introduced by controlling a parameter of the channel code to introduce a predetermined run length distribution in the marks on the disc. Kramer et al clearly teaches the

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EFM+ channel code to modify the run length distribution of the encoded data in such a way that a watermark can be provided. It is possible to change the run length distribution by the choice of the channel word for information words 1 up to and including 88. It is also possible to change the run length distribution by the choice of sync words or encoding states (column 1, lines 51-column 2, lines 63). It would have been obvious to one of ordinary skill in the art to control a parameter of the channel code to introduce a predetermined run length distribution in the marks on the disc in Murakami in order to improve the digital watermarking verification process, and decreases the number of illegal copies. Neither Murakami nor teaches that the second information is a non data area. Specifically, Morioka et al a record carrier (optical disc comprising a data area for storing data in the form of marks (data area 2, figure 1) in which the data is encoded by means of a channel code (EFM+) wherein a parameter of the channel code is controlled to introduce a predetermined run length distribution (paragraph [0056]) in the marks on the disc thereby introducing first information relating to a watermark (paragraph [0071]; disc identifier). Moreover, Morioka clearly teaches a data area (figure 12b, paragraph [0082]) comprising a second information relating to the visually discernable watermark (address end length of certification pits; paragraph [0082]) the first and the second information together forming the visually discernable watermark. It would have been obvious to one of ordinary skill in the art to have the second information as a non-data area in order to judge whether an optical disc to be reproduced is legitimate with more precision. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention by applicant.

As to claim 2, Morioka et al teaches the record carrier as claimed in claim 1, wherein the first and the second information forming the visually discernable watermark (34, 36) are visually aligned with respect to each other (paragraph [0082])

As to claim 3, Murakami et al teaches the record carrier as claimed in claim 2, wherein the first and the second information is orientated with respect to each other using position information (54) present in the non-data area (If the existence of the additional information is determined according to the identifier, the optical head is moved to a predetermined position in the optical disk where the additional information is recorded, paragraph [0093]).

As to claim 4, Murakami et al teaches the record carrier as claimed in claim 2, wherein the record carrier further comprises angle information indicating a predetermined angle between the first information and the second information (figure 6).

As to claim5, Murakami et al teaches the record carrier as claimed in claim 4, wherein the predetermined angle is used as authentication information (paragraph [0021] and paragraph [0097]).

As to claim 6, Murakami et al teaches the record carrier as claimed in claim 1, wherein the non-data area is an inner-ring area (21) and/or an outer-ring area (23) (The additional information area is located at a predetermined area in the inner peripheral portion of the optical disk, but it may be located at a predetermined area in the outer peripheral portion, paragraph [0021]).

As to claim 7, Murakami et al teaches the record carrier as claimed in claim 1, wherein the non-data area is a graphics band, text band, matrix band or identification band (figure 1B).

As to claim 8, Murakami et al teaches a record carrier as claimed in claim 1, wherein the second information comprises at least one picture and text information (paragraph [0103])

As to claim 9, Murakami teaches the record carrier as claimed in claim 1, the data area comprising a pattern of substantially parallel tracks, wherein the predetermined run length distribution is correlated from track to track, so that the first information is visually detectable (paragraph [0092-0093]).

As to claim 10, Murakami teaches a record carrier as claimed in claim 1, wherein a portion of the first information is non-visually detectable (paragraph [0092-93]).

As to claim 11-12, Murakami teaches a record carrier as claimed in claim 1, in which the channel code is the EFM channel code as used for the CD Digital Audio disc, wherein the parameter is the choice of merging bits (figure 20).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NANCY BITAR whose telephone number is (571)270-1041. The examiner can normally be reached on Mon-Fri (7:30a.m. to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nancy Bitar/
Examiner, Art Unit 2624

/Vikkram Bali/
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